THC (MARIJUANA)

THC Update Content:

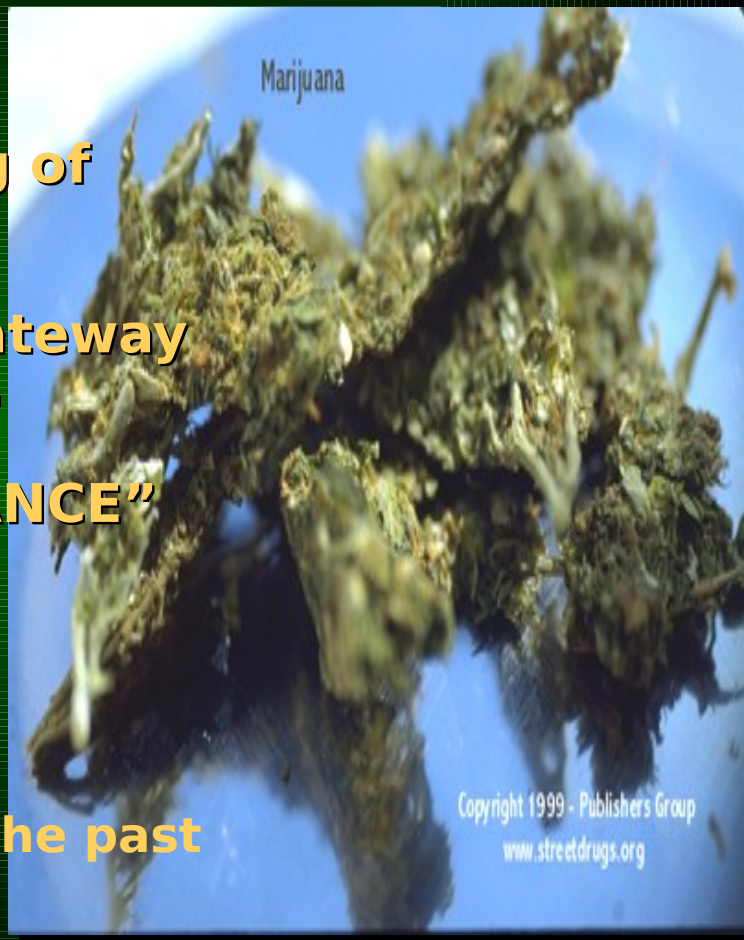
- **Introduction**
- **Marijuana Pharmacology and Effects**
- **Urinalysis and Drug Lab Procedures**

Goals and Objectives

- **Reduce the impact of THC use on the army.**
- **Understand the effects of THC on the body and brain.**
- **To diminish “barracks lawyer” tales.**

Introduction

- **Marijuana is still the #1 illicit drug of choice in the ARMY**
- **Marijuana is considered to be a gateway drug to other drug use and abuse.**
- **Army Drug Policy – "ZERO TOLERANCE"**
- **ARMY DRUG USE 1998 DOD SURVEY**
  - **9.8 % (7.7% is Marijuana) used in the past 12 months**

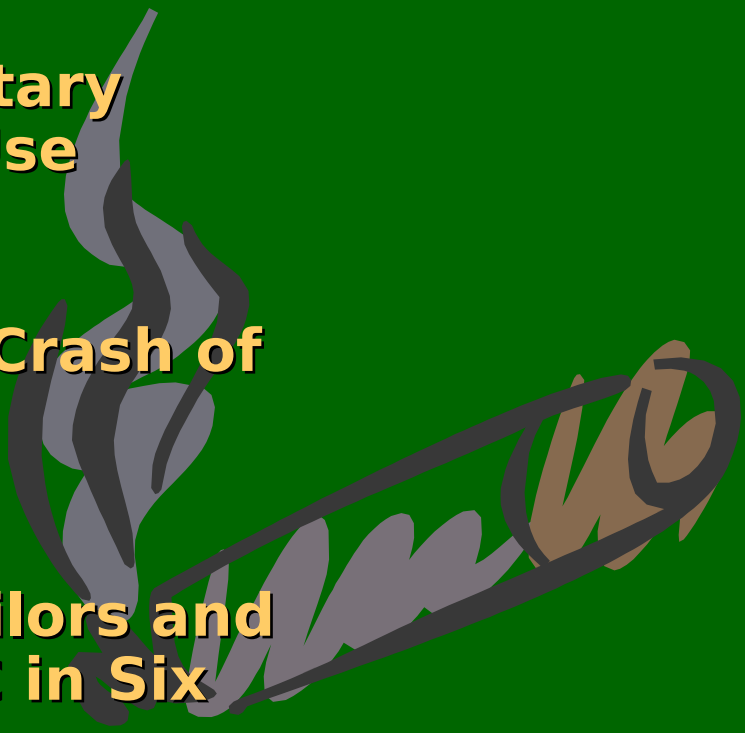


Introduction: 1960's – 1970's

- **Aftermath of Vietnam**
- **Drug treatment centers opened.**
- **A decade of change**
- **Drug screening labs upgraded to forensic**
- **Mandatory urinalysis.**

Introduction: War on Drugs

- **1980 - 33% of the Military Reported Illicit Drug Use**
- **1981 - U.S.S. NIMITZ Crash of Marine Corps EA-6B**
- **Autopsies of Killed Sailors and Marines Revealed THC in Six Bodies**
- **DOD Declared “War On Drugs.”**



Introduction: Attitudes

- **Shifting attitudes among parents of today's generation who themselves used marijuana in the 60’s -70’s.**

Introduction: Trends

- **More intense patterns of marijuana abuse such as “Blunt” marijuana cigars.**
- **Changes in public perception about marijuana as reflected by open use of the drug in film, media, musical recordings and rock or rap videos.**
- **$$ Marijuana can sell for $600 an ounce, $8,000 a pound, $20 for a blunt cigar.**

Introduction: Trends

- **Pulmonary risks of smoking marijuana are often ignored.**
- **Addiction is associated with alcohol and other drugs – not marijuana.**
- **THC is psychologically addictive - abuse and addiction is frequently denied.**

Introduction: Trends

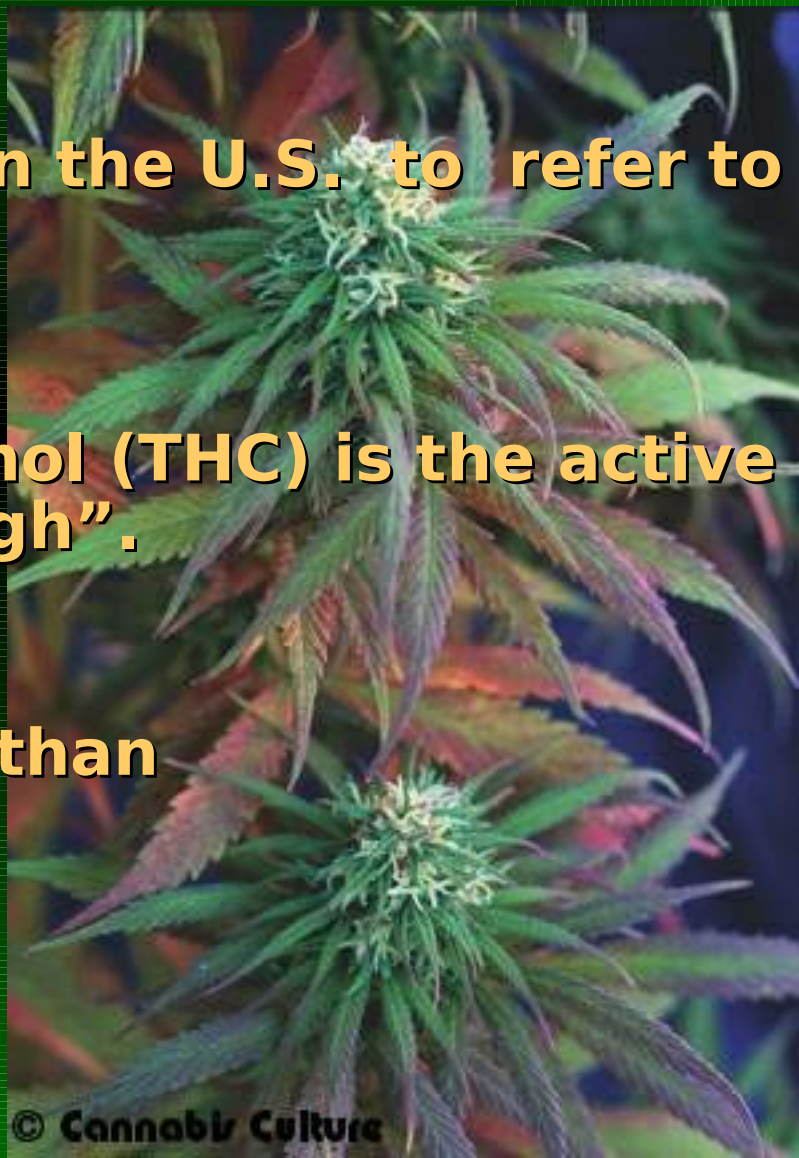
- **Marijuana is a psychoactive or mind altering drug.**

- **Psychoactive drugs can produce a mind state similar to psychosis.**

  - **<u>Psychosis</u> - A major mental disorder in which the personality is very seriously disorganized.**

Pharmacology Of Marijuana

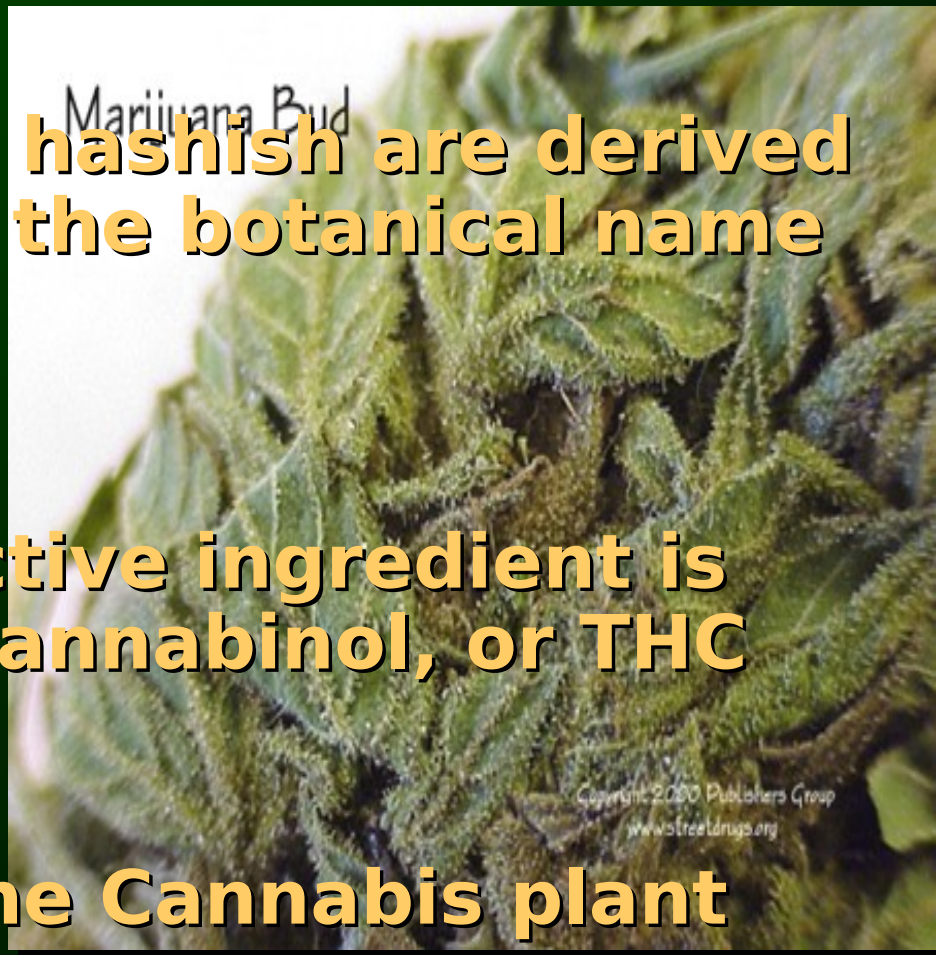
- Marijuana is the term used in the U.S. to refer to the cannabis plant.
- Delta 9 - Tetrahydrocannabinol (THC) is the active ingredient that causes the “high”.
- THC is much stronger today than in the 1960’s:
  - 1% THC content in 1960’s
  - 3 – 28% today



Pharmacology Of Marijuana

- **Recent domestic report revealed 29.86% THC content.**
- **Much more dangerous today.**
- **Mixing other drugs with THC by drug dealers and users.**

Cannabis
Marijuana, Hashish, Hash Oil



- ***Both*** **Marijuana and hashish are derived from the plant with the botanical name of Cannabis Sativa.**
- **The major psychoactive ingredient is delta-9-tetrahydrocannabinol, or THC**
- **421 Chemicals in the Cannabis plant**

Three Basic Forms

- **Marijuana - Made from the leaves, flowers or stems of the hemp plant.**
- **Hash/Hashish - Concentrated form of marijuana by compressing marijuana resins into small blocks.**
- **Hash Oil - Made by soaking marijuana in a chemical solvent (such as rubbing alcohol) and then evaporating the solvent to obtain an oil concentrate.**

Pharmacology

- **When smoked, the marijuana is absorbed through the capillaries in the lungs.**
- **When the marijuana is eaten, the chemicals are absorbed into the small intestines.**

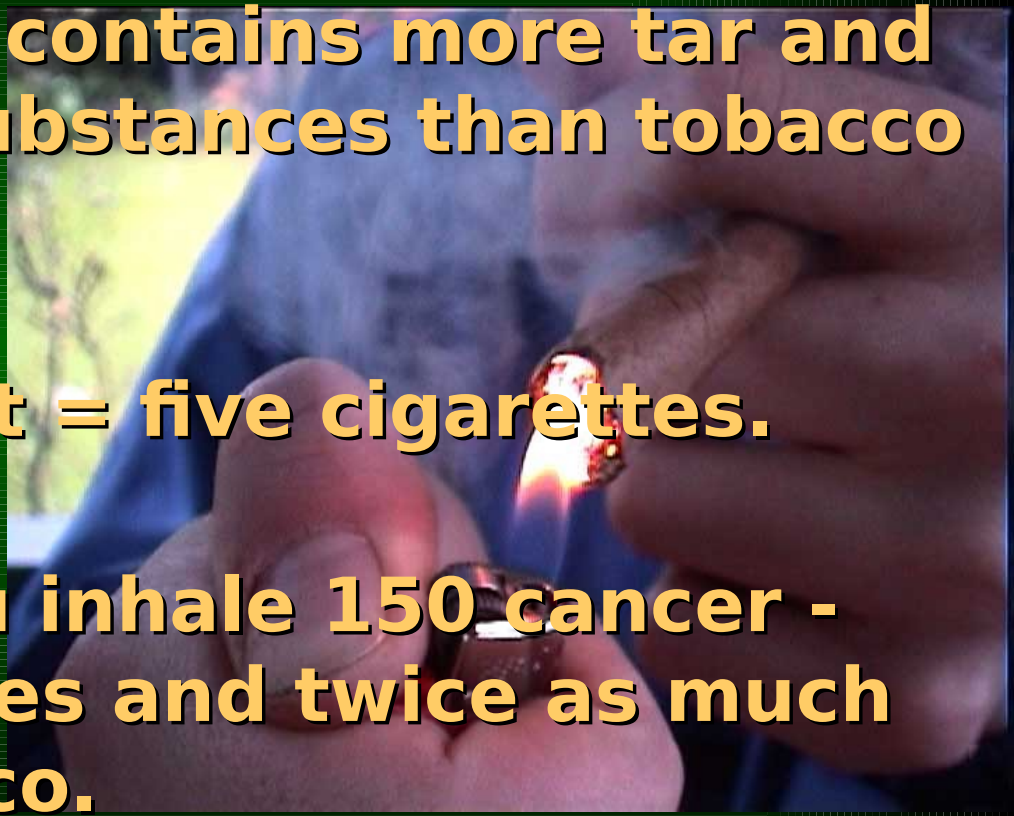
Acute Effects

- **Euphoria**
- **Short Term Memory Loss**
- **Increased Appetite**
- **Bloodshot Eyes**
- **Dry Mouth/Throat**
- **Sleepiness**

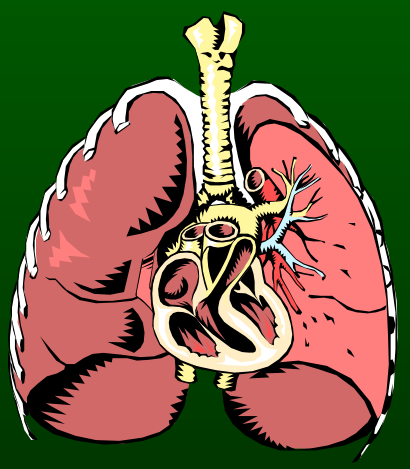
- **Increased Heart Rate**
- **Loss of Coordination**
- **Paranoia**
- **Hallucinations**
- **Chronic Panic Attacks**
- **Psychosis**

Acute Effects

- **Marijuana smoke contains more tar and cancer causing substances than tobacco smoke.**
- **Smoking one joint = five cigarettes.**
- **With one puff you inhale 150 cancer - causing substances and twice as much tar as with tobacco.**



Acute Effects



- **Smoking marijuana can cause:**
  - **Bronchitis**
  - **Lung cancer**
  - **Brain damage**
- **Smoking marijuana causes some neurotransmitters to clump up and become inactive.**
- **Neurotransmitters send messages throughout the brain for body functions.**
- **Interferes with thinking, ability to focus, memory lapses.**

Long Term Effects – Male Specific

- **Reduces male hormone testosterone.**
- **Sex organs do not function properly.**
- **Reduces sperm count in adult males.**
- **Ages 10-20 is when male sex organs are maturing.**
- **Use can cause long-term negative affects on sex organs.**

Long Term Effects – Female Specific

- **Testosterone increases causing facial hair, more body hair and acne.**
- **Decreased sexual pleasure.**
- **Disrupts menstrual cycles and ovulation.**

“Our First Line of Defense”

The ARMY URINALYSIS PROGRAM

Army Drug Screening Labs

- **Every specimen screened for the following drugs:**
  - **THC, Cocaine, Amphetamines (includes Methamphetamines, Ecstasy and other designer drugs)**
  - **At least one of the following:**
    - **Opiates (Codeine, Morphine, Heroin)**
    - **PCP**
    - **LSD**
    - **Barbiturates**
  - **Steroids can be checked upon request at the UCLA Olympic analytical drug lab.**

Army Drug Lab Procedures

- **All samples are checked**
- **Each drug has a cut-off level established by D**
- **3rd verification check (confirmation) - if positive 1st & 2nd time.**

Army Drug Lab Procedures

- **Positive samples:**
  - **Stored in original bottle and frozen for 1 year**
  - **Can be extended upon request**
  - **Suspected adulteration:**
    - **Message sent to command stating adulteration**
    - **C.O. Can still process or follow-up with another sample**

THC and Alcohol

- Alcohol's relationship to other drugs
- Alcohol - member of depressant family
- Synergistic with other drugs
- 1 + 1 = 3 ??
- Cross addictive to other drugs
- Cross tolerant to many other drugs
- Effects on judgment can lead to illicit THC or other drug use

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Employee Assistance/Prevention Coordinators

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Question and Answers

Question 1

The potency of marijuana is significantly higher now than it was 10 years ago.

True or False?

Answer is True.

Question 2

THC and other cannabinoids are soluble in fats and will concentrate in fatty tissue in the body.

True or False?

Answer is True.

Question 3

Very large doses of marijuana can cause the user to experience:

a. Confusion that turns into alertness
b. Anxiety and Panic that turns into relaxation
c. Restlessness
d. All of the above

Answer is C.

Question 4

Physical dependence (withdrawal symptoms after cessation of use) on cannabis has been documented under laboratory conditions.

True or False?

Answer is True.

Question 5

Marijuana contains 389 amounts of cancer causing materials than tobacco.

True or False?

Answer is False.

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